

CLAIMS

1/ A computer system comprising at least one computer with a processor operating under the control of a program, operating on input data items each suitable for being associated with a code and supplying output data items each suitable for being associated with a code and for being transmitted or applied to output members, the system being characterized by at least one peripheral external to the processor, connected to the processor to receive at least the input data codes, the operands, and the nature of the operation for each elementary operation performed by the processor, the peripheral having secure architecture and computing a code for each elementary operation performed by the processor and verifying proper operation of all or part of the executed program, while the processor performs computations only on the functional values of the encoded data.

2/ A computer system according to claim 1, in which the said program is permanent or downloaded.

3/ A computer system according to claim 1, in which the peripheral is single and associated with a host computer to provide security for all of a system having a plurality of computers connected to a common communications medium.

4/ A computer system according to claim 3, in which the host computer is fitted with a safety driver which enables it to dialog with the peripheral and with the other computers.

5/ A computer system according to claim 1, having a plurality of host computers, interconnected by a transmission medium and each provided with a security peripheral.

